

**REMARKS/ARGUMENTS**

Reexamination of the captioned application is respectfully requested.

**A. SUMMARY OF THIS AMENDMENT**

By the current amendment, Applicants basically:

1. Rewrite objected-to and allowable claims 2, 8, 24, 36, and 74 as independent claims, thereby rendering claims 2 – 6, 8 – 10, 24 – 34, 36 – 39, and 74 – 78 allowable.
2. Cancel claims 1, 7, 23, and 35 without prejudice or disclaimer.
3. Decline for the present time to provide a terminal disclaimer to overcome the alleged provisional obviousness-type double patenting rejection.
4. Remind the Examiner of the electronic filing on July 25, 2006 of an Information Disclosure Statement (IDS), and request that the Examiner initial and date the references listed on the PTO-1449 attached to the July 25 Information Disclosure Statement (IDS).

**B. PROVISIONAL OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION**

Applicants have noted the alleged provisional obviousness-type double patenting rejection involving co-pending US SN 10/815,978. Applicants respectfully submit that the rejection is not ripe since US SN 10/815,978 has not yet issued or even been allowed, and the final scope of claim coverage thereof not yet definitively determined. Moreover, the alleged fact that claim 1 of US SN 10/815,978 “anticipates” the broader claim of the captioned application is not viewed as reason for a obviousness-type double patenting rejection absent a showing that differences between the claims are obvious.

Applicants reserve the right to file a Terminal Disclaimer in the future to overcome any provisional obviousness-type double patenting rejection should such be necessary and depending on the order of allowance of the respective applications.

### C. AMENDMENTS TO THE CLAIMS

As previously indicated, allowable claims 2, 8, 24, 36, and 74 have been rewritten as independent claims. Moreover, some of the rewritten independent claims 2, 8, 24, 36 include further limitations that the drive circuit which applies the drive signal to the piezoelectric actuator as a series of high voltage charge packets *configured to dynamically shape a waveform for the piezoelectric actuator as the actuator operates in the pump*. Support for Applicants' dynamically shaping of a waveform for pump operation resides throughout the disclosure, such as the following paragraphs (for example): [00016], [00117], [00151], [00156], [00199].

### D. INFORMATION DISCLOSURE STATEMENT (IDS)

An Information Disclosure Statement (IDS) was electronically filed on July 25, 2006. The Information Disclosure Statement cites, e.g., references that were cited in U.S. Office Actions from the US Patent Office in co-pending applications, including one or more of US SN 10/815,999; US SN 10/815,978; and US SN 10/815,975. Among references directly applied in other applications are US 6,428,134 to Clark et al. and US Patent Publication US 2004/0145273 to Khoury et al.. Applicants believe that neither of these two references or others listed in the IDS provide a basis for denying patentability for the claims as now amended. For example, US Patent Publication US 2004/0145273 to Khoury et al. does not even pertain to pumps, and accordingly certainly does not dynamically shape a waveform for the piezoelectric actuator as an actuator operates in a pump.

### E. MISCELLANEOUS

In view of the foregoing and other considerations, all claims are deemed in condition for allowance. A formal indication of allowability is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,  
**NIXON & VANDERHYE P.C.**

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